

Street Audits of Nanwan Road South

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Nanwan Road South at the Wanzai Neighborhood was the first location chosen for Assignment one. It is selected for this assignment because there are significantly higher traffic volume and uses on the street. With a mixed land use nearby, the chosen corridor of Nanwan Road South covers 200 meters south and 800 meters north of the neighborhood's major intersection (Nanwan Road South crossing Jialin Road).



Figure 1. Map of Nanwan Road South



Figure 2. Satellite image of the selected corridor

The Built Environment and Active Transportation (BEAT) Neighborhood Assessment tool from the British Columbia Recreation and Parks and the Active Neighborhood Checklist (ANC) were the two methods used in the evaluation. The BEAT assessment tool comprised of a list of questions grouped in 10 sections by themes including Density and Land Use, Pedestrian Infrastructure, Bicycle Infrastructure, etc. Descriptions with scores ranging from one to three are provided as answers to the questions. The total score of the assessment and each section indicates the strength and weakness of the built environment in supporting active transportation. The result of the assessment for my selected corridor is 95, which is close to a score for exemplary built environment for active transportation. The sectional results show that the selected corridor should work toward better design for roads and parking, aesthetics and character, and other modes of active transportation.

The ANC audit assessed street-level active neighborhood features with five general areas such as quality of environment and land use. This audit is simpler and more straightforward as most of the checklist are yes-no closed questions. No scoring system was introduced. As this audit is item-specific, the result showed directly what need to be added and improved in the area.



Image 1. Panorama of the selected corridor

Both audits started with land use assessment. However, the ANC looked for more details especially in what specific land uses are present in the area. The ANC focused much on how much and what type of residential land uses were present, and what kind of facilities and services were accessible. The BEAT did not list types of land use and facility but asked for general descriptions on density and level of mixed use.

The BEAT assessment paid much attention to infrastructure for bicycles and pedestrians respectively, while the ANC asked more recapitulative questions of street characteristics, how walkable and bicycle-friendly the corridor was, and quality of the environment as two general areas of the audits. For example, the ANC looked for details such as sign, marking, width of shoulder as indicators for good bicycle infrastructure. The BEAT paid special attention also to bike racks on streets and on bus, accessible crossing lights for cyclists and connectivity of bikeway to nearby destinations in addition to what ANC asked for. This forced me to consider the local connectivity – the connection between not only destinations but also between the bikeway on the arterial road and services area. With the ANC, I will not be able to capture how problematic the ramp in front of Wanzai Middle School is. Here the sidewalk was raised by a ramp towards the main entrance of the school on Jialin Road. The adjacent bike lanes were at the ground level, with its connection to Jialin Road end abruptly at the intersection. To reach the school entrance from the south, a cyclist needs to cycle to the north of the intersection, make a U-turn, and use the sidewalk ramp to get to the entrance.

The two audits were aligned in examining the aesthetics, characters, and quality of the environment, with the BEAT audit focusing on the overall community characters such as streetscape and street-life quality. The ANC audit assess the quality of the environment based on pedestrian's experience. It looked for more explicit pedestrian infrastructure elements such as benches and drinking fountains, pedestrian level of comfort as indicated by slope of the walking area and the cleanliness of the sidewalk.

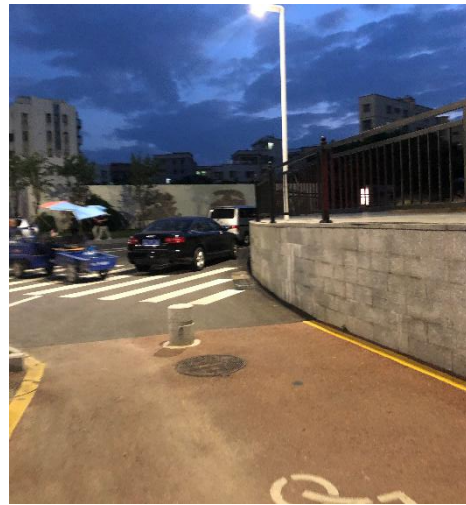
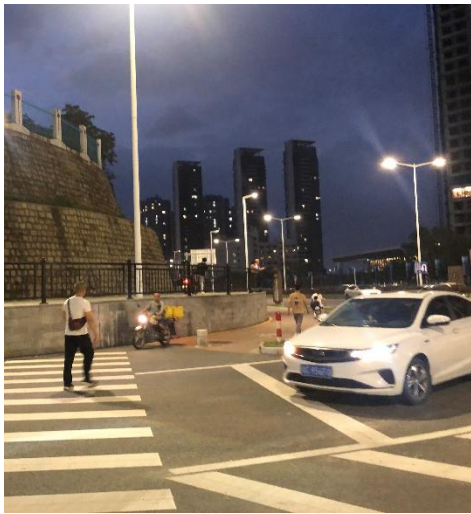


Image 2 & 3. The major intersection viewed from the south (left) and the north (right)

I found this made me aware of the importance of street furniture and public art in enhancing the pedestrian level experience and how this corridor can be improved to provide a more pleasant environment for pedestrians with public art and design.

There was one feature of the BEAT audit that I found interesting and inspiring. In the BEAT audit, there is one section that is related to planning and public engagement. Specifically, the BEAT audit raised questions about the local planning and advocacy for active transportation. This forced me to consider the impact of the provincial Greenway development project on the promoting active transportation. I think official plan for active transportation are essential to the normative construction of bikeway networks over the provinces. It also inspired me to think about other socio-economic factors that contributed to the active transportation promotion. One of the driving forces that are significant in China would be the proliferation of low-cost bike share services in recent years.

To sum up, the two audits used for evaluating the corridor have many similarities. They both looked at the local land uses, infrastructure for bicycle and pedestrians, safety, public transit, and street characters to assess the weakness and strength of the corridor to support active transportation. I would suggest future professional evaluations to combine the non-overlap details of the two audits. For example, the quantitative assessment method provided by the BEAT audit can be introduced to the ANC so that the strength and areas for improvement can be highlighted and provide insights for future development. I am inspired by both audits to look at the details that I missed in my previous observations. These two audit also forced me to reflect on the importance of both detailed quantitative audits and comprehensive qualitative evaluations.